PlayChoice™

COUNTERTOP NO: PCK-CT-US

Nintendo®

OPERATION MANUAL

WARNING

If the replacement parts and components in this PlayChoice™ Countertop are not installed exactly as instructed herein, there may be radio frequency interference created in violation of F.C.C. class A standards.

WARNING

This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a class A computing device pursuant to subpart J of part 15 of F.C.C. rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference; in which case, the user at his own expense will be required to take whatever measures may be required to correct the interference.

WARNING

Use of non-Nintendo parts or modifications to your PlayChoice™ Countertop parts and components may adversely affect the safety of your game, and may cause injury to your players.

TABLE OF CONTENTS

I. LOCATION SET UP

WARNING

CHECK THE FOLLOWING BEFORE PLUGGING THE GAME IN

The PlayChoice Countertop is shipped ready for operation. Please check the following to insure proper operation:

1. Check the exterior of the game for shipping damage, dents, chips or broken parts.
2. Make sure the swivel base operates.
3. Unlock the front control panel and rear service door and inspect the interior of the game.
4. Remove the plug-in connectors from the FCC board and unsnap the six (6) snap fasteners. (See. Fig. 2.) Pull out slowly until main PC board is clear of cage. Make sure all plug-in game boards are firmly connected. Slide main PC board and FCC cover back into place (make sure the edges of the PC board are in the card guide channels). Snap the six (6) snap fasteners and reconnect all the connectors.

A. Game Installation Requirements

AC Power:	120V Grounded Outlet Only
Amperage:	1.2 Amps
Temperature:	0 to 38 degrees Celsius (32 to 100 degrees Fahrenheit)
Humidity:	95% Relative Maximum
Countertop Space Requirement:	34″ Maximum Swing Diameter
Height:	21″

IF YOU HAVE ANY QUESTIONS, PLEASE CALL NINTENDO SERVICE AT:
1-800-633-3236

B. Power On/Off Switch

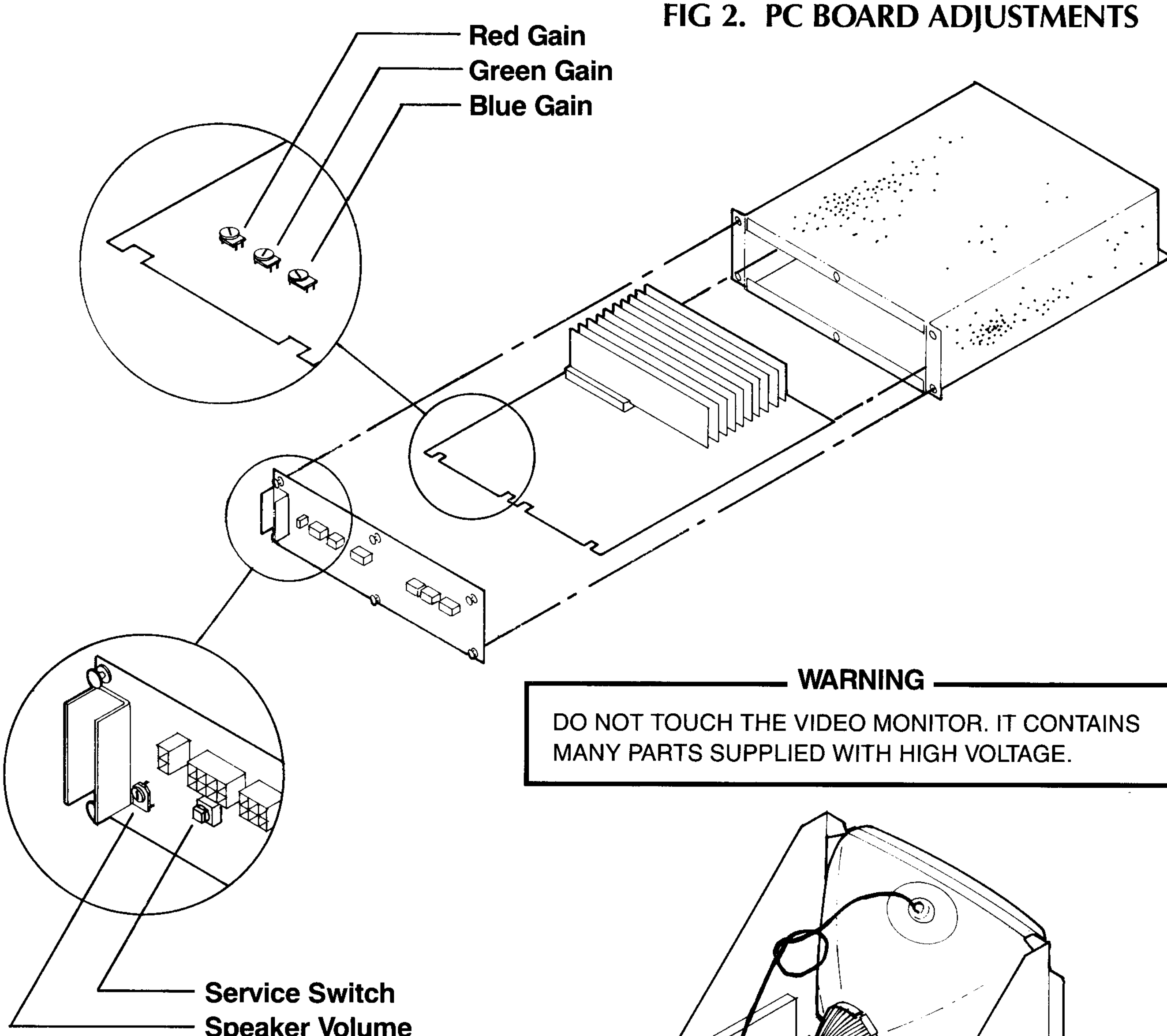
A Power On/Off Switch is located in the rear of the game, in the bottom left corner of the cabinet.

WARNING

USE ONLY A GROUNDED OUTLET FOR THIS GAME. FAILURE TO DO SO MAY RESULT IN DESTRUCTION OF ELECTRIC COMPONENTS.

II. ADJUSTMENTS

FIG 2. PC BOARD ADJUSTMENTS



WARNING

DO NOT TOUCH THE VIDEO MONITOR. IT CONTAINS MANY PARTS SUPPLIED WITH HIGH VOLTAGE.

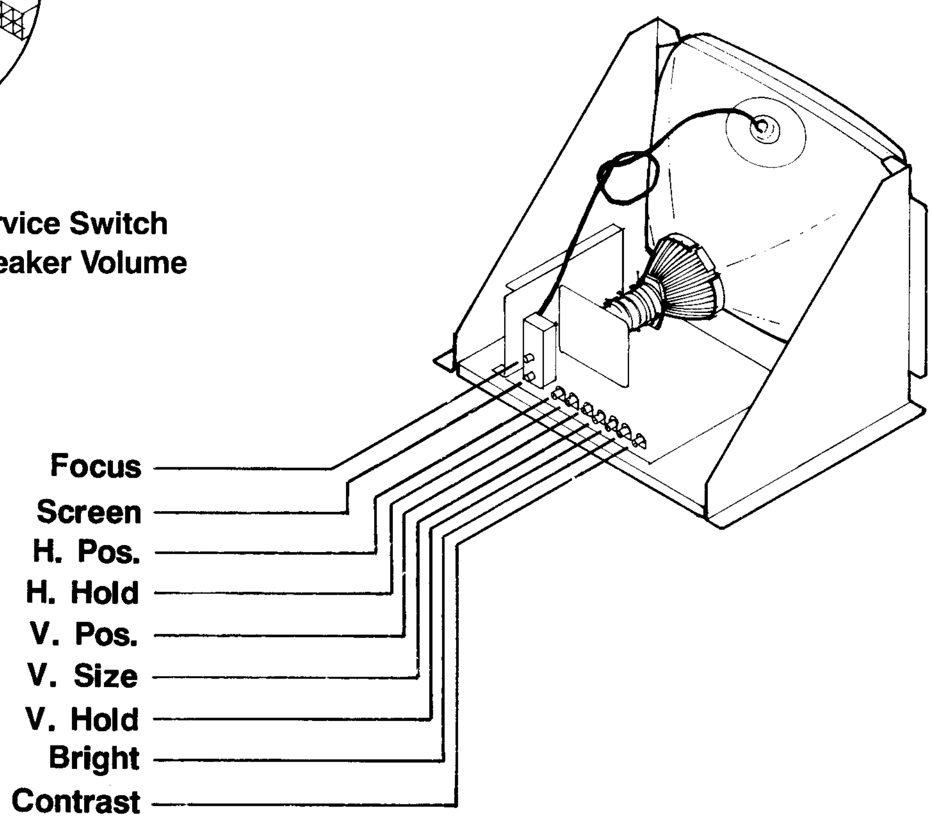


FIG 3. MONITOR ADJUSTMENTS

III. MAINTENANCE AND REPAIR

A. Fuse Replacements

This game contains two fuses. Replace only with the same type as listed:

Main Fuse (on Switch Plate)	4A 250V
Video Monitor Fuse	1.5A 125V Slow Blow

B. Cleaning

The exterior of the game and all metal parts can be cleaned with a nonabrasive cleanser. Use only a soft cloth and a plastic cleaner for cleaning the plastic front screen.

C. Control Panel and Coin Mechanism

Unlock the control panel by turning the key to the right and swinging the panel forward. (See Fig. 4.)

The coin mechanism can now be removed for repair or adjustment. Reach under the coin mechanism bracket and loosen the wing nut. Pull out and down. The coin mechanism wires must be disconnected before total removal is possible. Reverse the procedure for re-assembly.

D. Front Screen Removal

After opening the control panel, reach under the front screen just to the left of center using the finger hole. Pull forward to remove or replace the front screen. (See Fig. 4.)

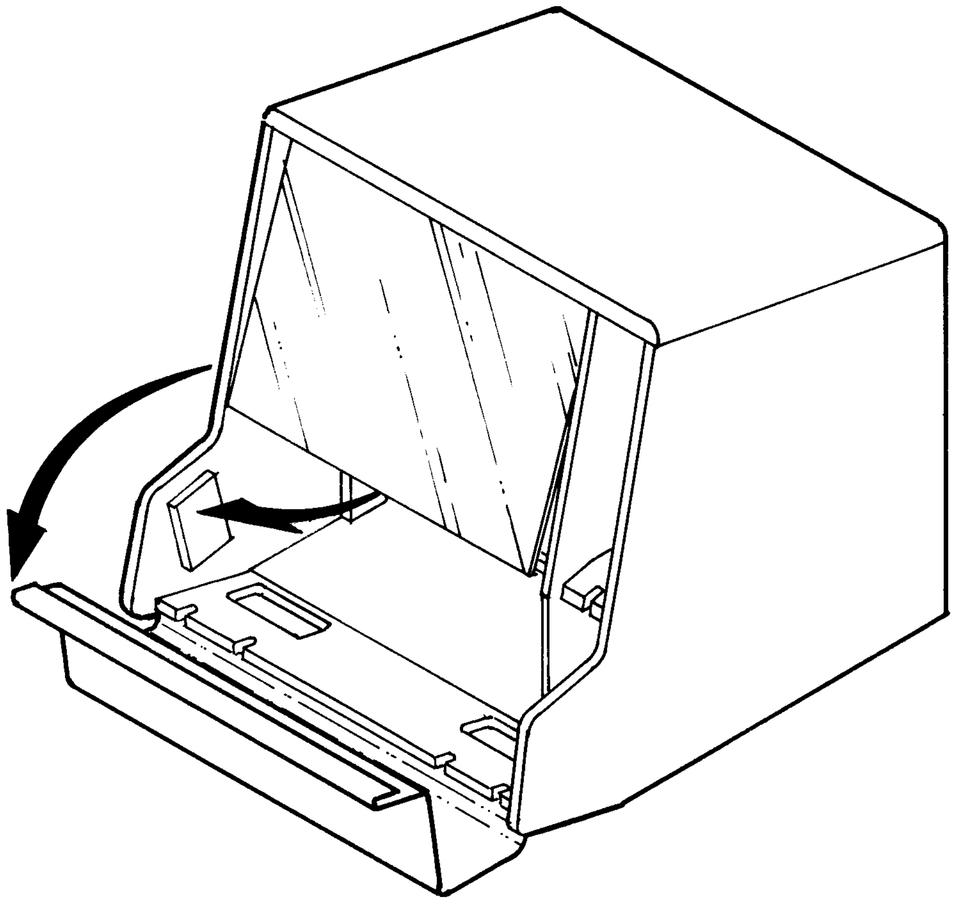


Fig. 4

E. Video Monitor Removal

If you need to remove the video monitor, follow the instructions listed below. However, the following procedure should only be performed by an experienced Service Technician:

WARNING

IT IS RECOMMENDED THAT THE GAME BE LEFT UNPLUGGED FOR AT LEAST ONE HOUR BEFORE REMOVING THE VIDEO MONITOR. THIS WILL PROBABLY DISCHARGE THE CRT, BUT EXTREME CAUTION IS STILL NECESSARY.

Video Monitor Removal — Continued

1. Make sure the game is unplugged.
2. Unlock and remove the back door and unplug all the harnesses and cables from the video monitor.
3. Standing at the front opening of the game, carefully remove the cardboard bezel attached at the corners with velcro. (See Fig. 6.)
4. Remove the four (4) mounting machine screws and disconnect the coin-timer PC board.
5. Carefully pull the video monitor straight out toward you.

WARNING

USE EXTREME CAUTION AND DO NOT TOUCH ELECTRICAL PARTS OF THE YOKE AREA WITH YOUR HANDS OR WITH ANY METAL OBJECT IN YOUR HANDS.

F. Game PCB Removal

1. Make sure the game is unplugged!
2. Open the back door.
3. Remove all the plug-in type connectors from the FCC board.
4. Pull out the six (6) snap fasteners on the perimeter of the cover. (See Fig. 2.)
5. Slowly pull the FCC board and main PC board out of the FCC cage.
6. Carefully pull the FCC board off the main board edge connectors or lay flat on a table as shown in Fig. 5 below.
7. Reverse the procedure *exactly* to reinstall.

NOTE: Make sure the left and right sides of the main PC board are properly installed in the channels of the card guides.

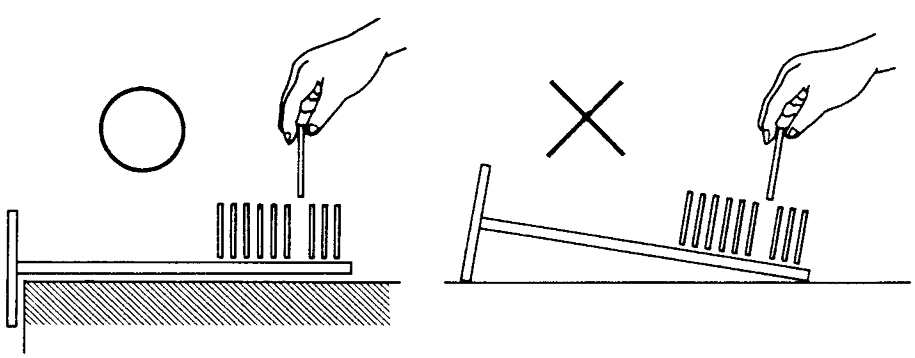
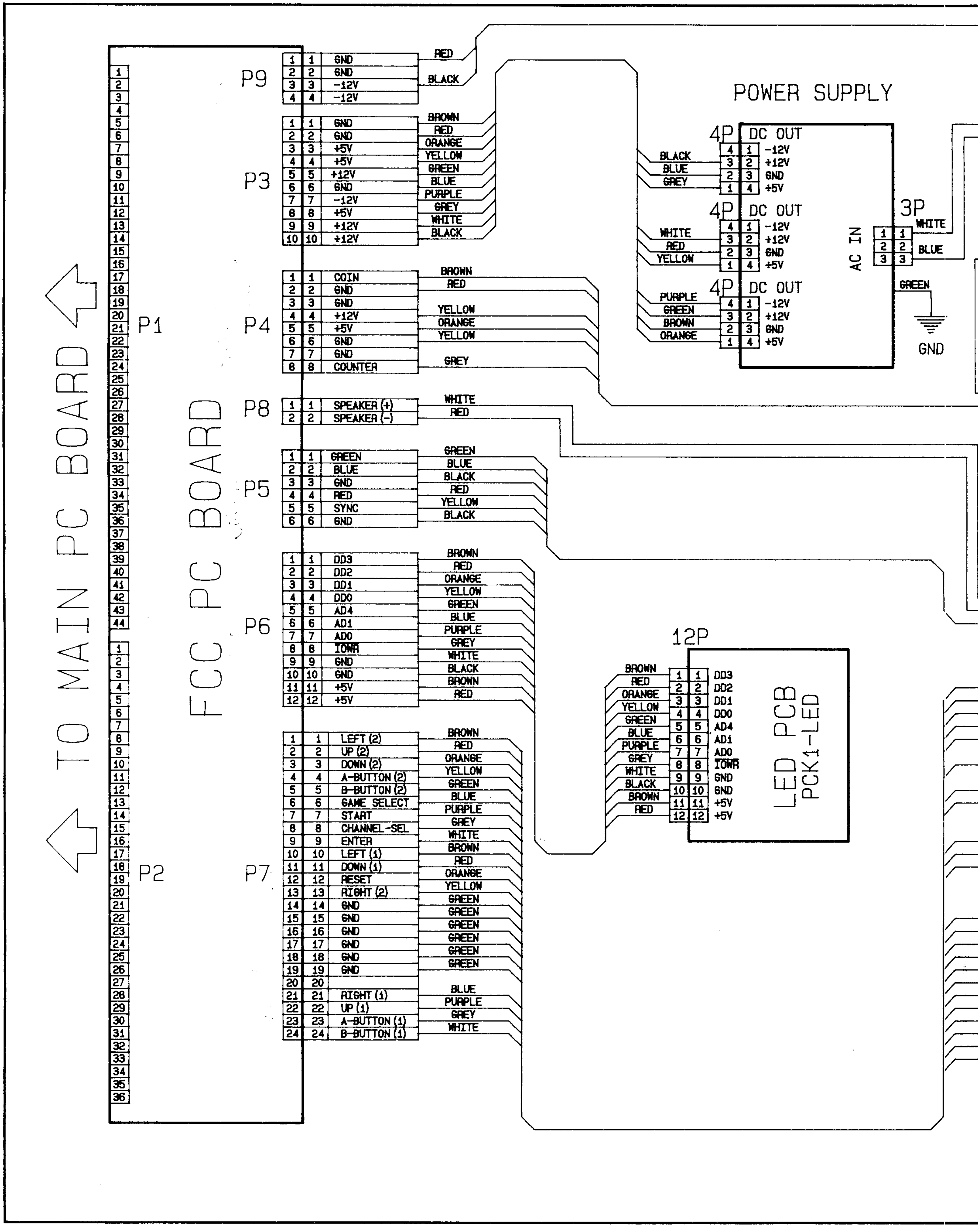


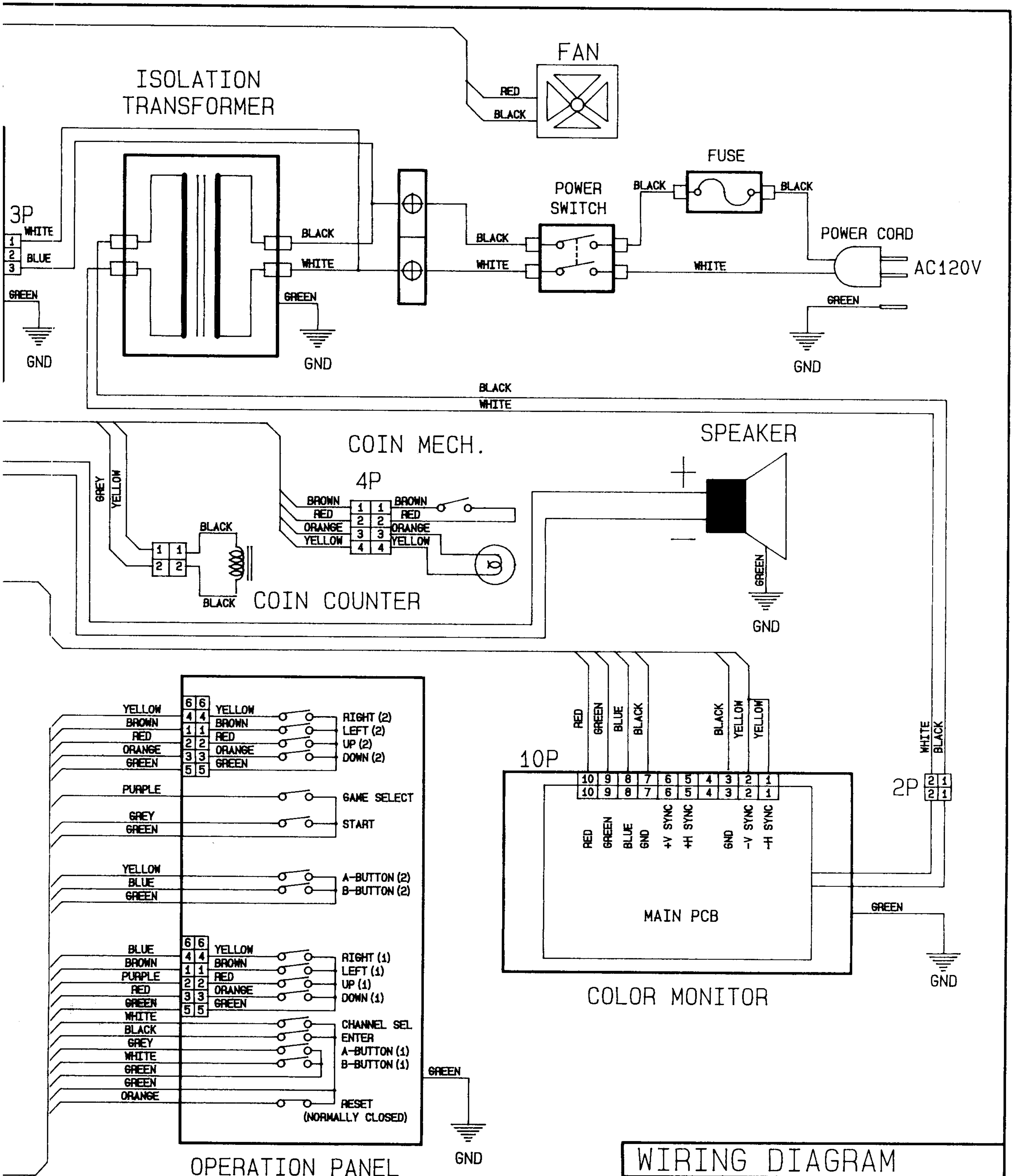
Fig. 5

IV. RADIO FREQUENCY INTERFERENCE

In order to protect against RFI radiated from this equipment, please comply with the following:

- Do not use non-Nintendo parts.
- Do not modify your game circuitry.
- Do not modify the wiring harness and connections.
- Connect this game only to a grounded 3-wire outlet.
- After servicing the game PCB, shut the shield cover completely with the snap fasteners. (See Fig. 2.)


TO MAIN PC BOARD
FCC PC BOARD
P1
P2
P9
1 GND
2 GND
3 -12V
4 -12V
RED
BLACK
P3
1 GND
2 GND
3 +5V
4 +5V
5 +12V
6 GND
7 -12V
8 +5V
9 +12V
10 +12V
BROWN
RED
ORANGE
YELLOW
GREEN
BLUE
PURPLE
GREY
WHITE
BLACK
P4
1 COIN
2 GND
3 GND
4 +12V
5 +5V
6 GND
7 GND
8 COUNTER
BROWN
RED
YELLOW
ORANGE
YELLOW
GREY
P8
1 SPEAKER (+)
2 SPEAKER (-)
WHITE
RED
P5
1 GREEN
2 BLUE
3 GND
4 RED
5 SYNC
6 GND
GREEN
BLUE
BLACK
RED
YELLOW
BLACK
P6
1 DD3
2 DD2
3 DD1
4 DD0
5 AD4
6 AD1
7 AD0
8 IOWR
9 GND
10 GND
11 +5V
12 +5V
BROWN
RED
ORANGE
YELLOW
GREEN
BLUE
PURPLE
GREY
WHITE
BLACK
BROWN
RED
P7
1 LEFT (2)
2 UP (2)
3 DOWN (2)
4 A-BUTTON (2)
5 B-BUTTON (2)
6 GAME SELECT
7 START
8 CHANNEL-SEL
9 ENTER
10 LEFT (1)
11 DOWN (1)
12 RESET
13 RIGHT (2)
14 GND
15 GND
16 GND
17 GND
18 GND
19 GND
20
21 RIGHT (1)
22 UP (1)
23 A-BUTTON (1)
24 B-BUTTON (1)
BROWN
RED
ORANGE
YELLOW
GREEN
BLUE
PURPLE
GREY
WHITE
BROWN
RED
ORANGE
YELLOW
GREEN
GREEN
GREEN
GREEN
GREEN
GREEN
BLUE
PURPLE
GREY
WHITE
POWER SUPPLY
4P DC OUT
1 -12V
2 +12V
3 GND
4 +5V
BLACK
BLUE
GREY
4P DC OUT
1 -12V
2 +12V
3 GND
4 +5V
WHITE
RED
YELLOW
4P DC OUT
1 -12V
2 +12V
3 GND
4 +5V
PURPLE
GREEN
BROWN
ORANGE
3P
AC IN
WHITE
BLUE
GREEN
GND
12P
LED PCB
PCK1-LED
1 DD3
2 DD2
3 DD1
4 DD0
5 AD4
6 AD1
7 AD0
8 IOWR
9 GND
10 GND
11 +5V
12 +5V
BROWN
RED
ORANGE
YELLOW
GREEN
BLUE
PURPLE
GREY
WHITE
BLACK
BROWN
RED

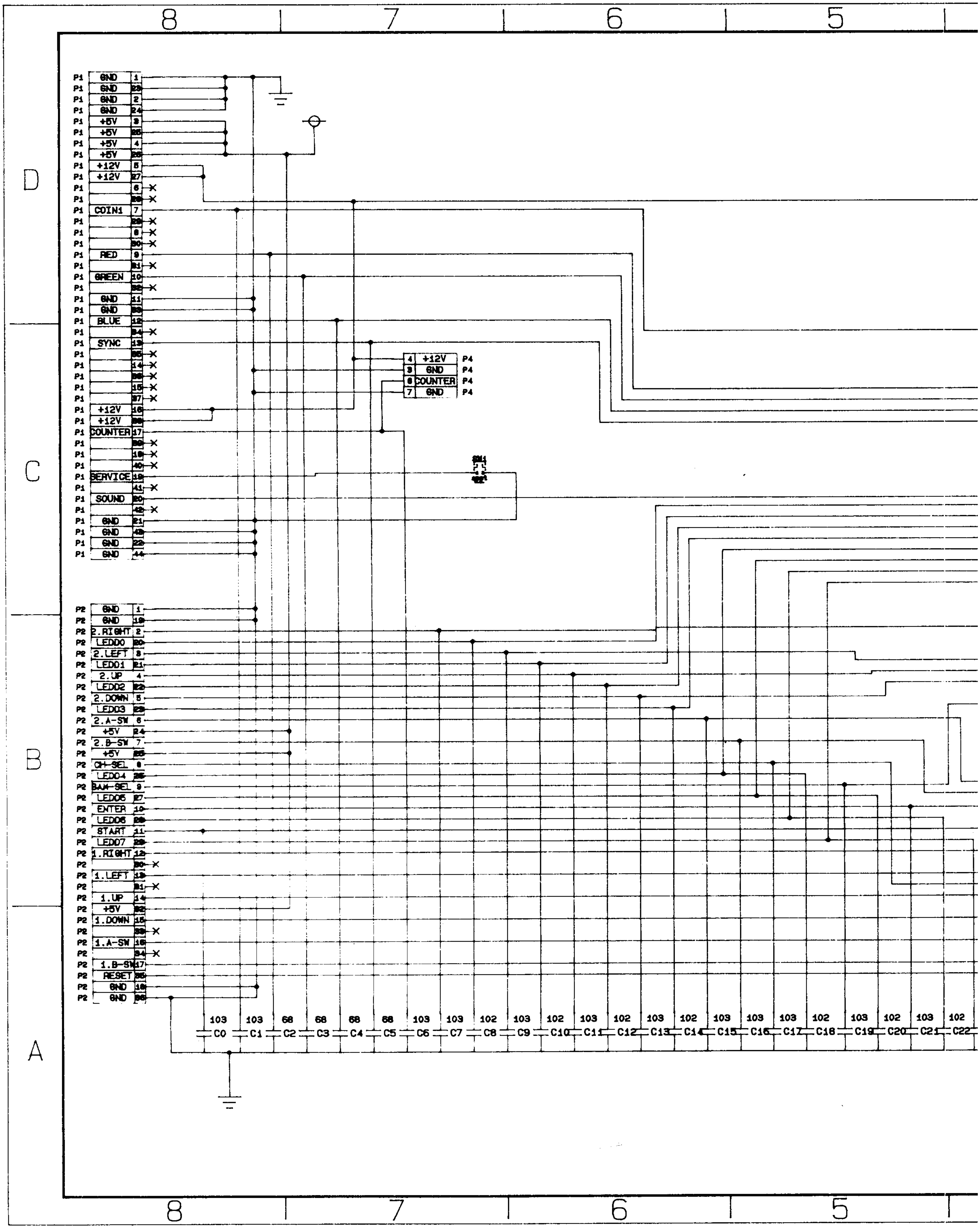


WIRING DIAGRAM

SCALE:
APPROVED BY:
DRAWN BY W.SHIRK
DATE: 01/13/89
REVISED

PCK COUNTER TOP

Nintendo of America Inc.
D: pc10\PCKWIR1.sch

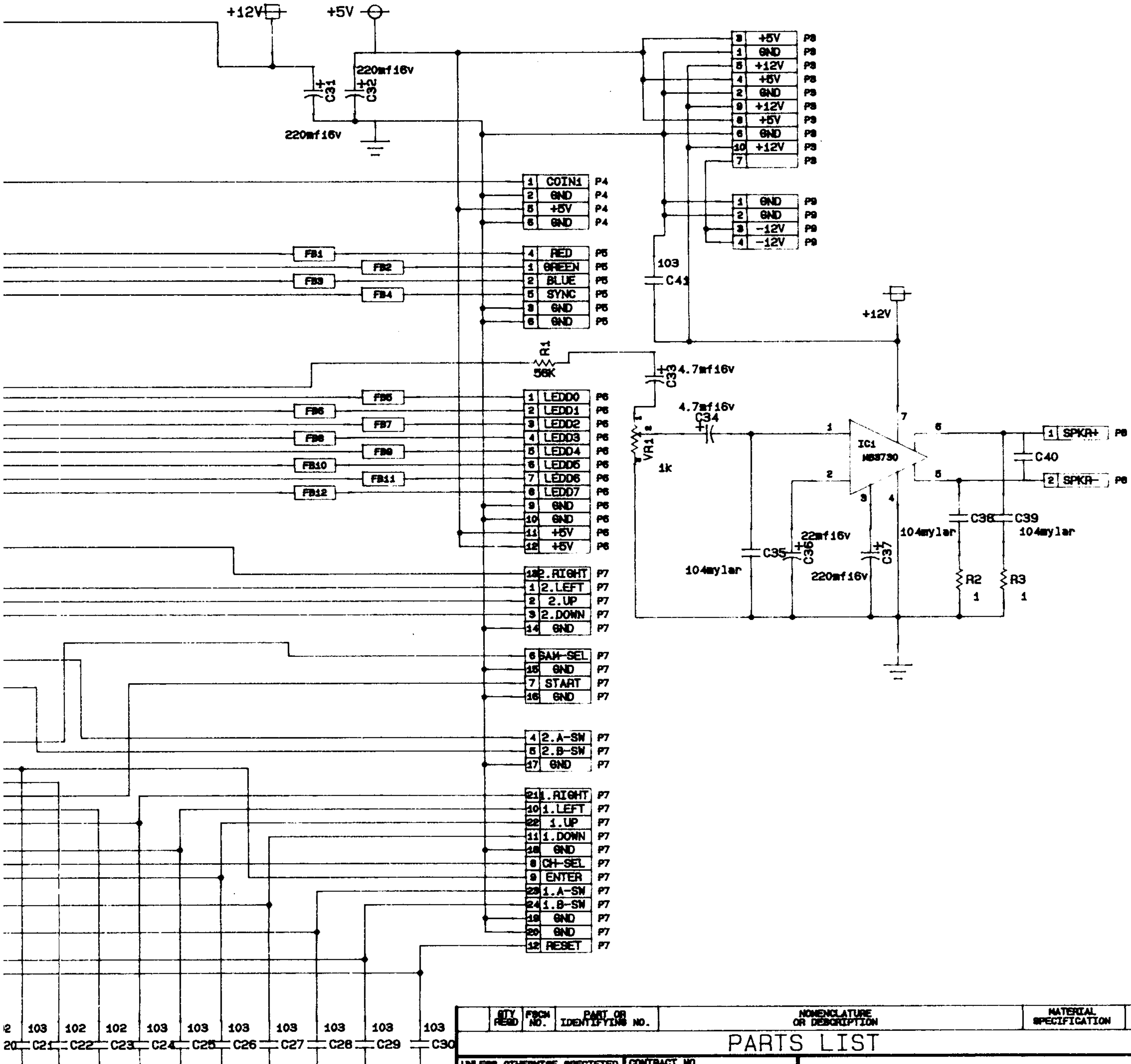


8
7
6
5
D
C
B
A
P1
GND
+5V
+12V
COIN1
RED
GREEN
BLUE
SYNC
COUNTER
SERVICE
SOUND
+12V
GND
COUNTER
P4
SW1
P2
GND
2.RIGHT
LED00
2.LEFT
LED01
2.UP
LED02
2.DOWN
LED03
2.A-SW
+5V
2.B-SW
CH-SEL
LED04
BAM-SEL
LED05
ENTER
LED06
START
LED07
1.RIGHT
1.LEFT
1.UP
1.DOWN
1.A-SW
1.B-SW
RESET
103
68
102
C0
C1
C2
C3
C4
C5
C6
C7
C8
C9
C10
C11
C12
C13
C14
C15
C16
C17
C18
C19
C20
C21
C22

DWG. NO.	SH	REV.

REVISIONS

ZONE	REV.	DESCRIPTION	DATE	APPROVED



QTY REQD	FSCM NO.	PART OR IDENTIFYING NO.	NOMENCLATURE OR DESCRIPTION	MATERIAL SPECIFICATION

PARTS LIST

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ARE :
FRACTIONS DECIMALS ANGLES
XX
XXX

MATERIAL

FINISH

DO NOT SCALE DRAWING

CONTRACT NO.

APPROVALS	DATE
DRAWN W.Shirk	12/19/88
CHECKED	
ISSUED	

Nintendo of America Inc.

PCKCT FCC PCB

SIZE	FSCM NO.	DWG. NO.	REV.
D			A

SCALE | SHEET

NEXT ASSY	USED ON
APPLICATION	

VII. REORDER PARTS LIST

BODY PARTS — FRONT VIEW (FIG. 6)

ITEM NO.	PART NUMBER	ORDER NO.	DESCRIPTION
1	PCKCT-01-01	8479	Cabinet, (PCKCT)
2	PCKCT-01-02	8480	Bracket, Front Screen (PCKCT)
3	PCKCT-01-03	8481	Speaker, SS403 (PCKCT)
4	PCKCT-01-04	8482	Power Supply, SPL-50-3200
5	PCKCT-01-05	8483	Bracket, Power Supply (PCKCT)
6	PCKCT-01-06	8484	Cover, Power Supply Bracket (PCKCT)
7	PCKCT-01-07	8485	Lock Catch, Control Panel (PCKCT)
8	PCKCT-01-08	8486	Game Counter, 6-Y-41611-401-SE
9	PCKCT-01-09	8487	Coin Slot, 25 cents (PCKCT)
10	PCKCT-01-10	8488	Bezel, Coin Slot (PCKCT)
11	PCKCT-01-11	8489	Bracket, Coin Mech. (PCKCT)
12	PCKCT-01-12	8490	Bezel, Coin Return (PCKCT)
13	PCKCT-01-13	8491	Coin Mech, 11-4040-09
14	PCKCT-01-14	8492	Control Panel Assy. (PCKCT)
15	PCKCT-01-15	8493	Grill, Speaker (PCKCT)
16	PCKCT-01-16	8494	Screen, Front (PCKCT)
17	PCKCT-01-17	8495	Bezel, Monitor (PCKCT)
18	PCKCT-01-18	8496	PCB, PCK1-LED Complete Assy (PCKCT)
19	PCKCT-01-19	8497	Bracket, LED PCB (PCKCT)
20	PCKCT-01-20	8498	Monitor, 13″ Y19G7803
21	PCKCT-01-21	8499	Picture Tube, (PCKCT)
22	PCKCT-01-22	8500	Manual, Operation (PCKCT)

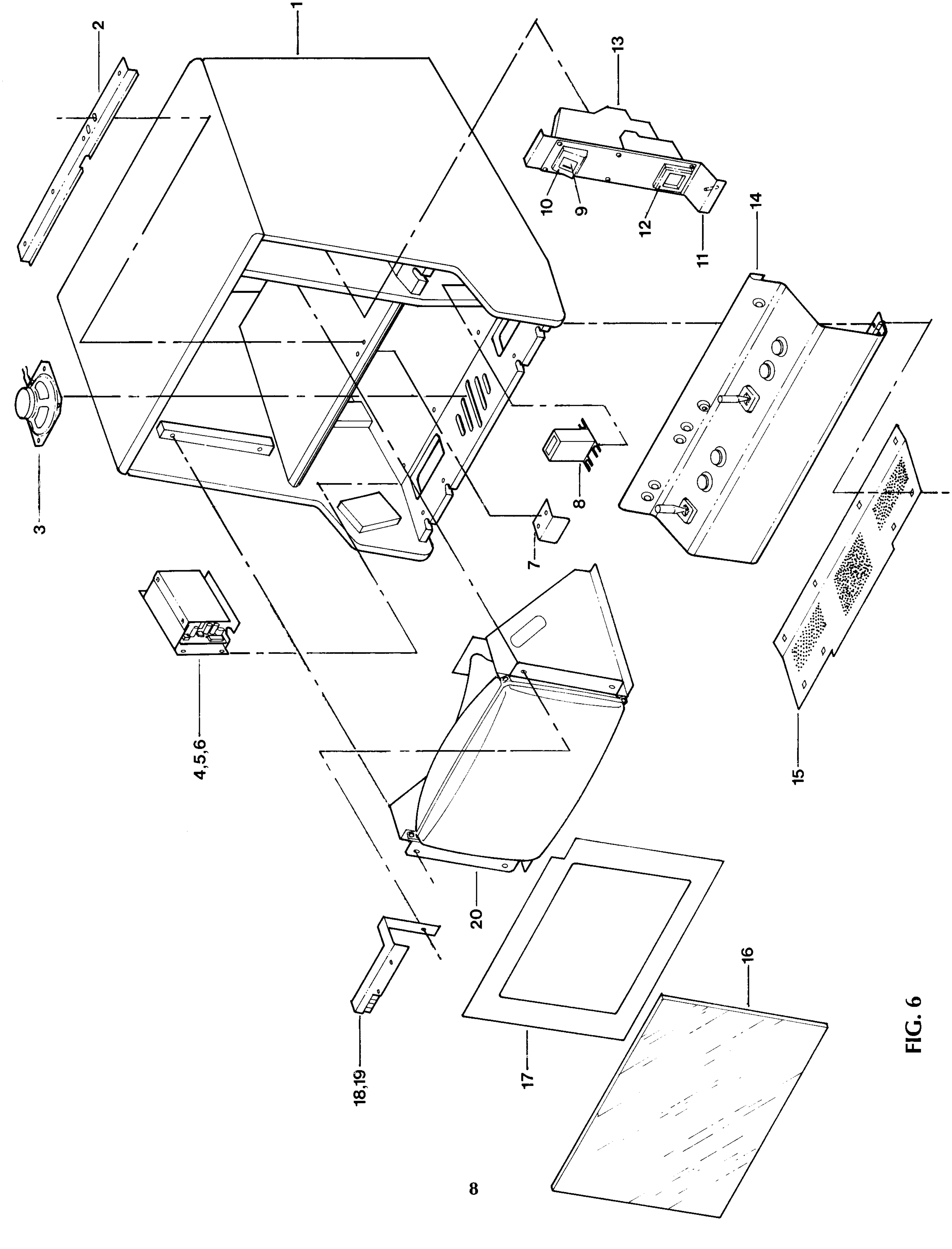


FIG. 6

BODY PARTS — REAR VIEW (FIG. 7)

ITEM NO.	PART NUMBER	ORDER NO.	DESCRIPTION
1	PCKCT-01-23	8501	Fan, DFA0812L Assy
2	PCKCT-01-24	8502	Bracket, Fan (PCKCT)
3	PCKCT-01-25	8503	Nut, 6-23 Kep (PCKCT)
4	PCKCT-01-26	8504	Power Switch Assy (PCKCT)
5	PCKCT-01-27	8505	Switch, Power XR-210K-ON-OFF
6	PCKCT-01-28	8506	Bracket, Power Switch (PCKCT)
7	PCKCT-01-29	8507	Cord, Power Assy (PCKCT)
8	PCKCT-01-30	8508	Bushing, Strain Relief SR 6P3-4
9	PCKCT-01-31	8509	Cage, FCC (PCKCT)
10	PCKCT-01-32	8510	PCB, PCK1-CPU Complete Assy
11	PCKCT-01-33	8511	PCB, PCK-CT-FCC Complete Assy
12	PCKCT-01-34	8512	Door, Back (PCKCT)
13	TKGU-01-03	632	Lock, K6510
14	TMAU-11-14	639	Cam, B31R
15	PCKCT-01-35	8513	Door, Cash (PCKCT)
16	TMAU-14-12	648	Lock, Cash Door
17	PCKCT-01-36	8514	Retainer, Door (PCKCT)
18	PCKCT-01-37	8515	Box, Cash (PCKCT)
19	PCKCT-01-38	8516	Transformer, 3P87
20	PCKCT-01-39	8517	Lock Catch, Cash Door (PCKCT)
21	PCKCT-01-40	8518	Fuse, 4A 250v
22	PCKCT-01-41	8519	Fuse, 1.5A SB 125v

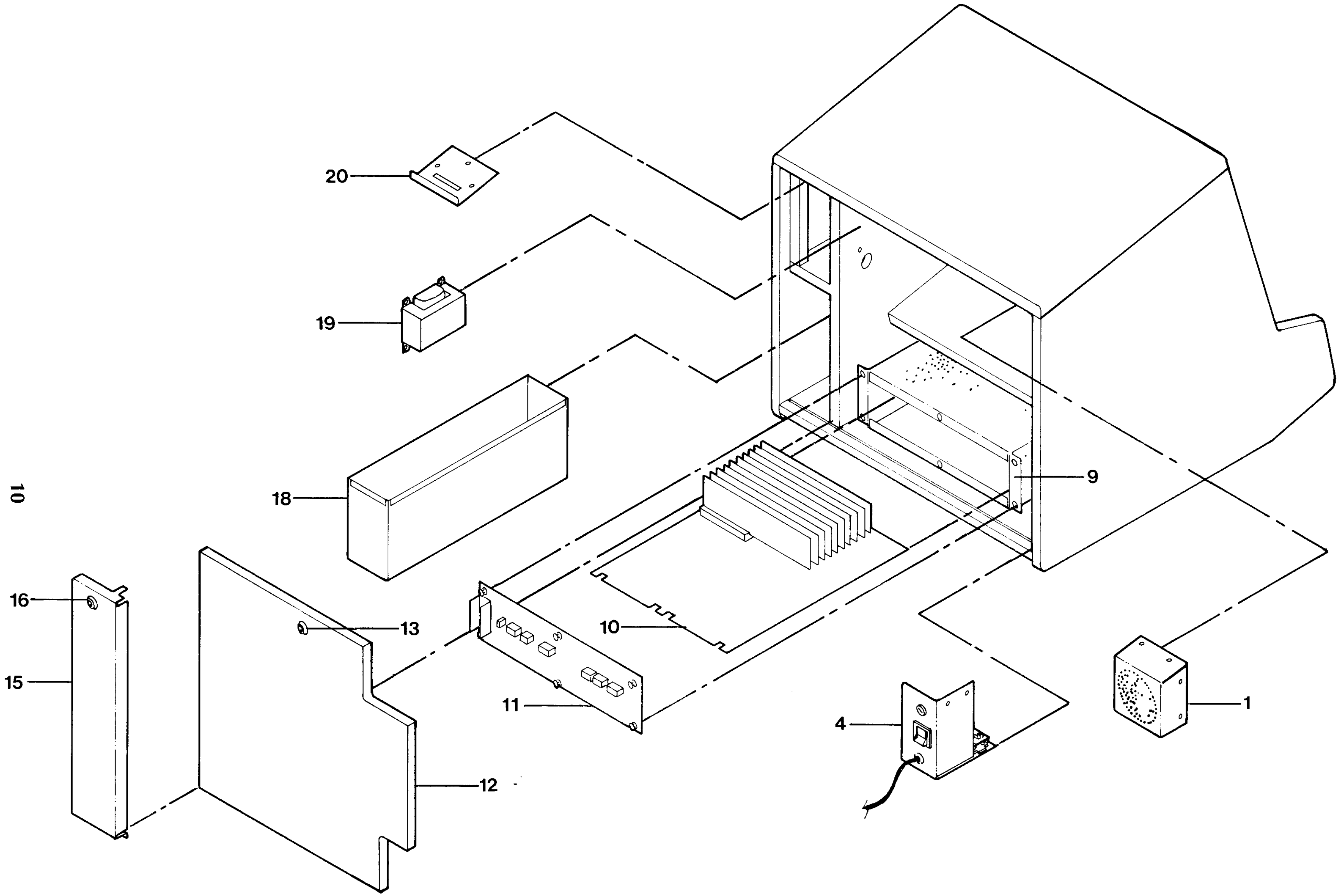


FIG. 7

CONTROL PANEL ASSEMBLY (FIG. 8)

ITEM NO.	PART NUMBER	ORDER NO.	DESCRIPTION
1	PCKCT-23-01	8521	Base, Control Panel w/overlay (PCKCT)
2	PCKCT-23-02	8522	Overlay, Control Panel (PCKCT)
3	PCKCT-23-03	8523	Joy Stick, SWSTK
4	PCKCT-23-04	8524	Hinge, 87942-1088
5	MDSA-23-29	933	Collar, Switch P163
6	MDSA-23-30	934	Bezel, Switch P163
7	MDSA-23-31	935	Switch, P163CWAG Red
8	TKGU-01-03	632	Lock, #K6510
9	TMAU-11-14	639	Cam, B31R
10	PCKCT-23-05	8525	Button Assy, 53-9200-16 Black
11	PCKCT-23-06	8526	Button Assy, 53-9200-10 Red
12	PCKCT-23-07	8527	Sponge, 19.7 x 0.5 x 0.5 Black w/Ad
13	PCKCT-23-08	8528	Nut, 8-32 Kep

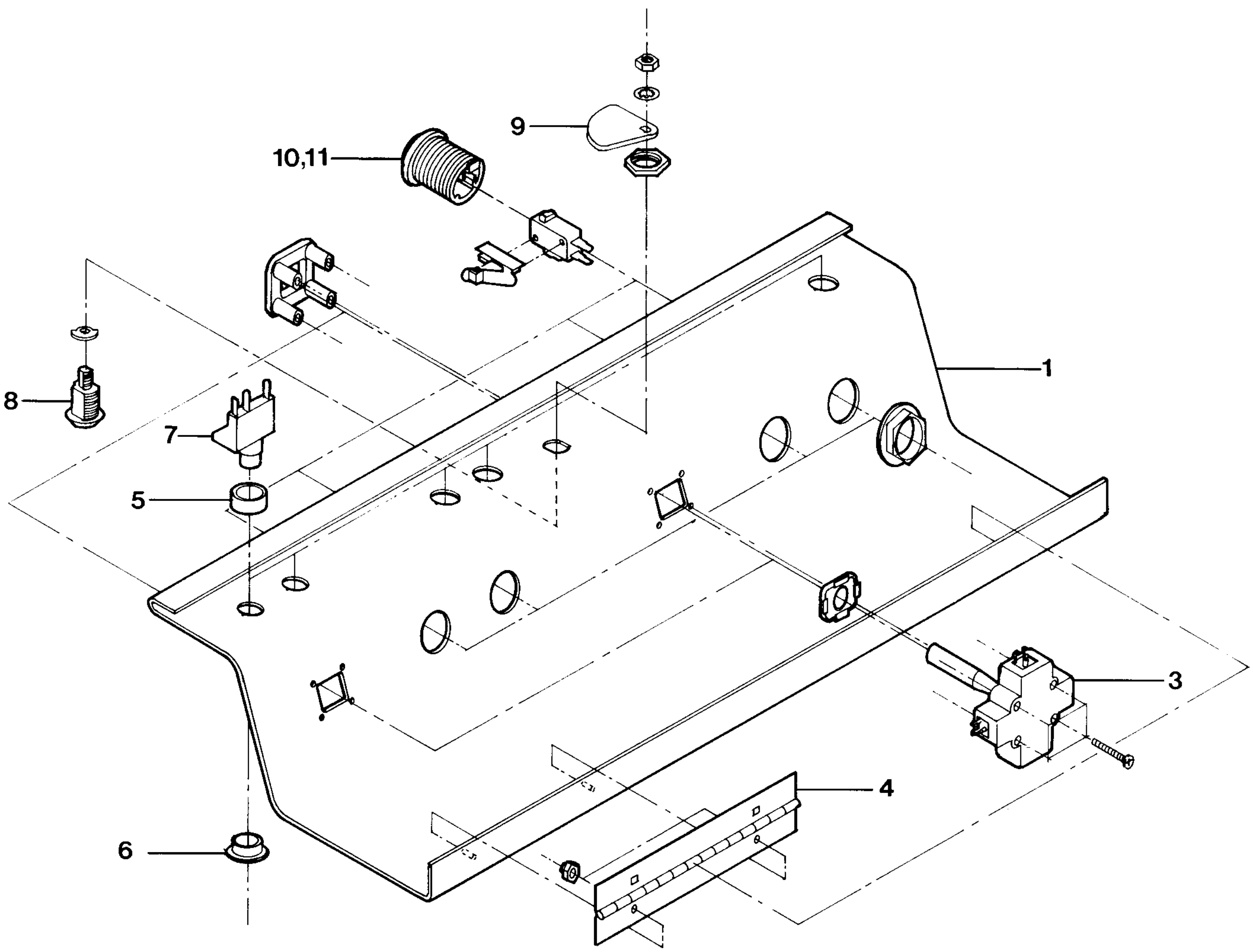


FIG. 8

WIRING HARNESSES

PART NUMBER	ORDER NO.	DESCRIPTION
PCKCT-41-01	8530	Harness, Control 24P (PCKCT)
PCKCT-41-02	8531	Harness, Joystick 6P (PCKCT)
PCKCT-41-03	8532	Harness, Power 10P (PCKCT)
PCKCT-41-04	8533	Harness, Video 6P (PCKCT)
PCKCT-41-05	8534	Harness, Counter/Coin 8P (PCKCT)
PCKCT-41-06	8535	Harness, LED 12P (PCKCT)
PCKCT-41-07	8536	Harness, Speaker 2P (PCKCT)
PCKCT-41-08	8537	Harness, Coin 4P (PCKCT)
PCKCT-41-09	8538	Harness, Monitor 2P (PCKCT)
PCKCT-41-10	8539	Harness, Power Supply 3P (PCKCT)
PCKCT-41-11	8540	Harness, Transformer (PCKCT)
PCKCT-41-12	8541	Harness, Fan 3P (PCKCT)
PCKCT-41-13	8542	Wire, Fuse Black (PCKCT)
PCKCT-41-14	8543	Wire, Power Switch White (PCKCT)
PCKCT-41-15	8544	Wire, Power Switch Black (PCKCT)

MONITOR PARTS

PART NUMBER	ORDER NO.	DESCRIPTION
MON-20-01	8558	IC, Regulator STR 3123
MON-20-02	8559	IC, Video UPC 1397 NEC
MON-20-03	8560	IC, Horiz Vert LA7823
MON-20-04	8561	IC, Vert Output UPC 1378
MON-21-01	8562	Diode, D1 Fast SW RU-2
MON-21-02	8563	Diode, SI 1A 600v
MON-21-03	8564	Diode, GFE 10R
MON-22-01	8565	Transistor, NPN CC
MON-22-02	8566	Transistor, 2SD1398
MON-22-03	8567	Transistor, 2SC2068
MON-23-01	8568	Coil, Width — T0DAI
MON-23-02	8569	Coil, Lin — T0DAI
MON-24-01	8570	Transformer, Flyback
MON-24-02	8571	Transformer, Horiz Driver
MON-25-01	8572	Res, Variable 2K ohm
MON-25-02	8573	Res, Variable 10K ohm
MON-25-03	8574	Res, Variable 200 ohm
MON-25-04	8575	Res, Variable 200K ohm
MON-25-05	8576	Res, Variable 500 ohm
MON-25-06	8577	Res, Trim Pot 2K ohm 0.3w
MON-25-07	8578	Res, Trim Pot 200 ohm
MON-26-01	8579	Cap, Electrolytic 1.0 UF 50v
MON-26-02	8580	Cap, Electrolytic 10 UF 25v
MON-26-03	8581	Cap, Electrolytic 22 UF 160v
MON-26-04	8582	Cap, Electrolytic 47 UF 25v
MON-26-05	8583	Cap, Electrolytic 470 UF 16v
MON-26-06	8584	Cap, Electrolytic 1000 UF 16v
MON-26-07	8585	Cap, Electrolytic 1000 UF 25v
MON-26-08	8586	Cap, PolyPro PP6100 2% 1500v
MON-26-09	8587	Cap, PolyPro .39 UF 5% 200v
MON-26-10	8588	Cap, .1 20% 125v AC
MON-26-11	8589	Cap, Disc .0015 10% 500v
MON-26-12	8590	Cap, Disc .0022 10% 500v
MON-27-01	8591	Res, M. Oxide 3.9K 5%
MON-27-02	8592	Res, 2.7 ohm 5% 7w
MON-27-03	8593	Res, Thermister
MON-28-01	8594	Fuse, 1.5A
MON-29-01	8595	Plug, 2 Pin
MON-29-02	8596	Plug, 4 Pin

MAIN PC BOARD — PLAYCHOICE

PART NUMBER	ORDER NO.	DESCRIPTION (Reference Designations and Locations)	
PCKU-21-01	7929	PCK1 CPU Complete PCB Assembly	
PCHU-21-11	946	Z80A Microprocessor	(5X)
PCHU-21-12	945	RP2A03E Microprocessor	(1H)
PCHU-21-13	4460	RP2C03B PPU	(3H)
PCKU-21-14	7936	27128 16K-Byte EP-ROM 300ns PCK 1-C-8T	(8T)
PCKU-21-15	7937	2764 8K-Byte EP-ROM 300ns PCK 1-C-8K	(8K)
PCKU-21-16	7938	2764 8K-Byte EP-ROM 300ns PCK 1-C-8M	(8M)
PCKU-21-17	7939	2764 8K-Byte EP-ROM 300ns PCK 1-C-8P	(8P)
PCHU-21-18	2060	TMM2115BP-15 2K-Byte RAM 150ns	(2K)
PCHU-21-19	2061	HM6116 ASP-20 2K-Byte RAM 200ns	(4K, 8R, 8V)
PCHU-21-20	4811	TC5517 CPL-20 2K-Byte C-MOS RAM 200ns	(8W)
PCKU-21-21	7940	N82SI29N 256 x 4-Bit Bipolar ROM PCK1-C-6D	(6D)
PCKU-21-22	7941	N82SI29N 256 x 4-Bit Bipolar ROM PCK1-C-6E	(6E)
PCKU-21-23	7942	N82SI29N 256 x 4-Bit Bipolar ROM PCK1-C-6F	(6F)
PCHU-21-24	2189	74LS00 Quad 2-Input NAND	(5H, 8J, 6U)
PCHU-21-25	2190	74LS02 Quad 2-Input NOR	(4U)
PCHU-21-26	2191	74LS04 Hex Inverters	(8D, 3G, 8G, 5J, 7R, 7Y, 4Z)
PCHU-21-27	2193	74LS08 Quad 2-Input AND	(7X)
PCHU-21-28	2195	74LS11 Triple 3-Input AND	(5P)
PCHU-21-29	2196	74LS14 Hex Schmitt Inverters	(4V)
PCHU-21-30	2202	74LS32 Quad 2-Input OR	(7C, 5T)
PCHU-21-31	2203	74LS42 4 To 10 Decoders	(4T)
PCHU-21-32	2204	74LS55 2-Wide 4-Input AND-OR-INVERT Gates	(5K)
PCHU-21-33	2205	74LS74A Dual "D" Flip-Flops (P, CL)	(7J, 7K, 5M)
TPP2-06-20	2208	74LS86 Quad 2 Input EX-OR	(4M)
PCHU-21-34	2210	74LS109A Dual J-K Flip-Flops (PLE, CL)	(4Y)
PCHU-21-35	2216	74LS139 Dual 2 To 4 Decoders	(7H, 2L, 6T)
PCHU-21-36	2220	74LS157 Quad 2 To 1 Data Selectors	(7S, 7T, 7U, 7V)
PCHU-21-37	2223	74LS161A 4-Bit Binary Counters	(6H, 6J, 6K, 6L, 6M, 4R)
PCHU-21-38	2225	74LS164 8-Bit Shift Registers	(8H, 5Q)
PCHU-21-39	2226	74LS165A 8-Bit Shift Registers	(8B, 8C, 7F)
PCHU-21-40	2228	74LS175 Quad "D" Flip-Flops (CL)	(4S)
PCHU-21-41	2229	74LS194A 4-Bit Shift Registers	(6Q, 6R)
PCHU-21-42	2230	74LS240 Octal Bus Inverters (TS)	(5A, 6A, 7B)
PCHU-21-43	2232	74LS244 Octal Buffers & Line Drivers (TS)	(6B, 1L, 2M, 3M, 8S, 5V, 6V)
PCHU-21-44	2233	74LS245 Octal Bus Transceivers (TS)	(1K, 6Z)
PCHU-21-45	2235	74LS259 8-Bit Addressable Latches	(7D, 7E)
PCHU-21-46	2239	74LS299 8-Bit Shift/Storage Registers	(7L, 7N, 7Q)
PCHU-21-47	2242	74LS367A Hex Bus Drivers	(4L)
PCHU-21-48	2243	74LS368A Hex Bus Drivers	(8E, 8F, 5S)
PCHU-21-50	2247	74LS377 Octal "D" Flip-Flops	(6P)
PCHU-21-51	2267	74S04 Hex Inverters	(2G, 6N)
PCHU-21-52	2259	7437 Quad-2-Input NAND Buffers	(4X)
PCHU-21-53	2278	75471 Dual Peripheral AND Drivers	(6C)
PCHU-21-54	4812	74HC10 Triple 3-Input NAND C-MOS	(8Y)
PCKU-21-55	8004	TC74HC373 Octal 3-State D-Latches C-MOS	(3K)
PCKU-21-55	1143	PST518A Low Voltage Detector	(7Z)
PCHU-21-56	1445	LM324 Quad Operational Amplifiers	(3E)
PCHU-21-57	1443	LM3900 Quad Operational Amplifiers	(1E)

PART NUMBER	ORDER NO.	DESCRIPTION (Reference Designations and Locations)	
PCKU-21-57	7943	TC 4053BP Triple 2-Channel Multiplexer C-MOS	(5C)
PCHU-21-58	735	CD 406 6B Quad Analog Switches C-MOS	(3C)
PCHU-21-59	2178	2SA933 Silicon PNP Transistor	(Q11, Q12, Q14, Q15, Q17, Q18)
PCHU-21-60	2179	2SA1015 Silicon PNP Transistor	(Q3, Q5, Q7, Q20)
PCHU-21-61	2184	2SC1740 Silicon NPN Transistor	(Q8∿Q10, Q13, Q16, Q19, Q20∿Q26)
PCHU-21-62	2185	2SC1815 Silicon NPN Transistor	(Q1, Q2, Q4, Q6)
PCHU-21-63	1003	ES1F Diode	(D1)
PCHU-21-64	1012	1S5277B Diode	(D3, D4)
PCHU-21-65	4813	EG01Y Diode	(D2)
PCHU-21-66	1002	DAN401 Quad Cathode-Common Diode Array	(DA1∿DA8)
PCHU-21-67	4817	1.0f 5.5V Electric Double Layer Capacitor (EEC F5R 5U105)	(C3)
PCHU-21-68	680	68pf 50V Ceramic-Disc Capacitor	(D44)
PCHU-21-69	663	100pf 50V Ceramic-Disc Capacitor	(C35, C36, C46, C71)
PCHU-21-70	669	180pf 50V Ceramic-Disc Capacitor	(C11, C39)
PCHU-21-71	675	330pf 50V Ceramic-Disc Capacitor	(C2, C6, C40, C41)
PCKU-21-71	7945	470pf 50V Ceramic-Disc Capacitor	(C12)
PCHU-21-72	664	1000pf 50V Ceramic-Disc Capacitor	(C5)
PCHU-21-73	665	0.01uf 50V Ceramic-Disc Capacitor	(C4, C22, C38, C43, C80∿C83, C86∿C89, C91, C92, C94∿C101, C103∿C108, CC110∿C120, C122∿C126, C128, C130∿C144, C146, C148∿C156, C158∿C163, C165∿C187)
PCHU-21-74	4815	0.047uf 50V Ceramic-Disc Capacitor	(C15∿C17)
PCHU-21-75	655	0.2uf 12V Ceramic-Disc Capacitor	(C21)
PCHU-21-76	716	0.047uf 50V Film Capacitor	(C33, C34)
PCHU-21-77	685	1uf 16V Al Electrolytic Radial Cap.	(C7, C8)
PCHU-21-78	689	3.3uf 16V Al Electrolytic Radial Cap.	(C13, C14, C25, C28, C31, C32)
PCHU-21-79	683	10uf 16V Al Electrolytic Radial Cap.	(C23, C24, C26, C27, C29, C30, C37, C42)
PCHU-21-80	688	33uf 16V Al Electrolytic Axial Cap.	(C9)
PCHU-21-81	4818	47uf 16V Al Electrolytic Radial Cap.	(C47∿C50)
PCHU-21-82	684	100uf 16V Al Electrolytic Axial Cap.	(C46)
PCHU-21-83	4819	100uf 25V Al Electrolytic Axial Cap.	(C70)
PCHU-21-84	687	220uf 16V Al Electrolytic Axial Cap.	(C1)
PCHU-21-85	691	470uf 16V Al Electrolytic Axial Cap.	(C20)
PCHU-21-86	4820	3.3uf 16V Tantalum Electrolytic Cap.	(C85, C90, C93, C102, C109, C121, C127, C145, C157)
PCHU-21-87	2075	0 Ohm Shunt Lead	(R99)
PCHU-21-88	2076	10 Ohm 1/4W ± 5% Resistor	(R7)
PCHU-21-89	2120	33 Ohm 1/4W ± 5% Resistor	(R32, R37)
PCHU-21-90	2137	51 Ohm 1/4W ± 5% Resistor	(R8, R19, R23, R27, R31)
PCHU-21-91	2077	100 Ohm 1/4W ± 5% Resistor	(R17, R68, R69, R73)
PCHU-21-92	2082	110 Ohm 1/4W ± 5% Resistor	(R3)
PCHU-21-93	2121	330 Ohm 1/4W ± 5% Resistor	(R13, R14, R18, R21, R25, R29, R36, R90, R91, R97, R93, R110, R111, R112)
PCHU-21-94	2138	510 Ohm 1/4W ± 5% Resistor	(R46, R56, R66)
PCHU-21-95	2155	820 Ohm 1/4W ± 5% Resistor	(R1, R2)
PCHU-21-96	2078	1K Ohm 1/4W ± 5% Resistor	(R94∿R96, R120∿R131)
PCHU-21-97	2099	2K Ohm 1/4W ± 5% Resistor	(R15, R87, R109)
PCHU-21-98	2105	2.2K Ohm 1/4W ± 5% Resistor	(R35, R40, R42, R50, R45, R52, R55, R60, R62, R65)
PCHU-21-99	2134	4.7K Ohm 1/4W ± 5% Resistor	(R43, R53, R63)
PCHU-21-100	2139	5.1K Ohm 1/4W ± 5% Resistor	(R4, R5, R22, R26, R30, R88, R89)
PCHU-21-101	2152	7.5K Ohm 1/4W ± 5% Resistor	(R16)

MAIN PC BOARD (CONTINUED)

PART NUMBER	ORDER NO.	DESCRIPTION (Reference Designations and Locations)	
PCHU-21-102	2079	10K Ohm 1/4W±5% Resistor	(R12, R34, R38, R41, R44, R51, R54, R61, R64, R74, R82, R83, R92, R93, R100∿R102, R104, R106, R108)
PCHU-21-103	2086	12K Ohm 1/4W±5% Resistor	(R71)
PCHU-21-104	2100	20K Ohm 1/4W±5% Resistor	(R6, R39, R70, R72, R103, R105, R107)
PCHU-21-105	2080	100K Ohm 1/4W±5% Resistor	(R33, R75)
PCHU-21-106	2101	200K Ohm 1/4W±5% Resistor	(R9∿R11)
PCHU-21-107	2126	360K Ohm 1/4W±5% Resistor	(R79)
PCHU-21-108	2154	750K Ohm 1/4W±5% Resistor	(R78, R80, R84)
PCHU-21-109	2081	1M Ohm 1/4W±5% Resistor	(R76, R85)
PCHU-21-110	2097	1.8M Ohm 1/4W±5% Resistor	(R81)
PCHU-21-111	2107	2.2M Ohm 1/4W±5% Resistor	(R77, R86)
PCHU-21-112	2068	Hex 5.1K Ohm Series Resistor Array	(RM1, RM16)
PCHU-21-113	2065	Octal 1K Ohm Series Resistor Array	(RM5, RM8∿RM10, RM13)
PCHU-21-114	2071	Quad 68 Ohm Parallel Resistor Array	(RM6, RM7, RM11, RM12, RM14, RM15)
PCHU-21-115	4821	NT-01 Resistor Array	(RM2∿RM4)
PCHU-21-116	2290	500 Ohm Variable Resistor, Red Cap	(VR1)
PCHU-21-117	2289	500 Ohm Variable Resistor, Green Cap	(VR2)
PCHU-21-118	2279	500 Ohm Variable Resistor, Blue Cap	(VR3)
PCHU-21-119	2411	8MHZ Crystal	(X1)
PCHU-21-121	2414	21.47727MHZ Crystal	(X2, X3)
PCHU-21-123	2174	8-Station, Single-Throw, DIP Bit Switch	(SW1, SW2)
PCHU-21-124	4823	MINI-BIT Header	(SW3)
PCHU-21-125	2166	16 Pin DIP IC Socket	(S6∿S8)
PCHU-21-126	2171	28 Pin DIP IC Socket	(S2∿S5)
PCHU-21-127	2172	40 Pin DIP IC Socket	(S1, S9, S10)
PCHU-21-129	4880	96 Pin DIN Connector Receptacle	(CH1∿CH10)
PCHU-21-130	4825	GL-3HD1 Visible Light Emitting Diode	(LED1)

FCC PC BOARD

PART NUMBER	ORDER NO.	DESCRIPTION	LOCATION(S)
PCKCT-24-01		Conn, Edge 44 pin	P1
PCKCT-24-02		Conn, Edge 36 pin	P2
MDST-31-02		IC, Audio Amp MB3730	IC1
PCKCT-24-03		VRES, 1K Ohm	VR1
PCKCT-24-04		Switch, SPST Mom. B3F	SW1
MON-61-02		Res, Carbon 56K 1/4w 5%	R1
MON-13-00		Res, Carbon 1 ohm 1/4w	R2, R3
PCKCT-24-05		Bead, Ferr. BL01RN1-AL2	FB1-FB12
PCKCT-24-06		Cap, Epoxy 68pf	C2, C3, C4, C5
PCKCT-24-07		Cap, Epoxy 0.01mf(103)	C0, C1, C6, C7, C9, C11, C13, C15, C16, C17, C19, C21, C24, C25, C26, C27, C28, C29, C30, C41
PCKCT-24-08		Cap, Epoxy 0.001(102)	C8, C10, C12, C14, C18, C20, C22, C23
MDSU-08-42		Cap, Mylar 0.1mf(104)	C35, C38, C39
TKG-15-16		Cap, Electro 4.7mf 16v	C33, C34
TRS-07-69		Cap, Electro 22mf 16v	C36
CHPU-21-68		Cap, Electro 220mf 16v	C31, C32, C37

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